

## **ABSTRACT**

A method for automatically reducing noises in an earphone using an audio transceiver is disclosed. The audio transceiver includes an audio transmitter, an audio auto-adjusting module, an audio amplifying module, an audio detecting and receiving module, a power set and a manual adjusting button. The method comprises the steps of: receiving external interference audio signals in the audio detecting and receiving module of the audio transceiver; generating mixing frequency signals in the audio auto-adjusting module; the mixing frequency signals having frequencies near the frequencies of the external interference audio signal; a phase difference of about 180 degree from the interference audio signal and amplitudes approximately equal to those of the external interference audio signals; transferring the mixing frequency signals to the audio amplifying module for amplifying the mixing frequency signals; and transmitting the amplified mixing frequency signals so as to cancel the external interference audio signals.